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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/497,801 | 02/04/2000 | David Angelo Ferrucci | YO999-201 | 7921 |
| 21254 | 7590 | 03/11/2004 | EXAMINER | |
| MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817 | | | HUTTON JR, WILLIAM D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2178 | |
| DATE MAILED: 03/11/2004 | | | | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------|-------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/497,801 | FERRUCCI ET AL. | |
| | Examiner Doug Hutton | Art Unit 2178 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 February 2000.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 8-20 and 22-24 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7,21 and 25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 04 February 2000 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Species I in Paper No. 5 is acknowledged.

Claims 8-20 and 22-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

Specification

The disclosure is objected to because of the following informalities:

- the term "independence" on Page 8, Line 13 should be amended to — independent — so that the sentence reads more clearly;
- the phrase "domain concepts" on Page 5, Line 9 should be amended to — domain components — because that is how the elements are previously identified (see Specification – Page 4, Line 11); this problem (using alternative terms for "domain components") is replete throughout the Specification, and it makes Applicant's disclosure confusing; in order to prevent such confusion, Applicant should refer to each element of the invention by only one term and use that term throughout the Specification whenever that element is discussed;

- the phrase “artifact components” on Page 5, Line 9 should be amended to — document components — because that is how the elements are previously identified (see Specification – Page 4, Line 11); this problem (using alternative terms for “document components”) is replete throughout the Specification, and it makes Applicant’s disclosure confusing; in order to prevent such confusion, Applicant should refer to each element of the invention by only one term and use that term throughout the Specification whenever that element is discussed;
- the phrase “variable elements of a document component (model)” on Page 8, Lines 11-12 should be amended to — document component variables — so that the sentence reads more easily; this problem (using alternative terms for “document component variables”) is replete throughout the Specification, and it makes Applicant’s disclosure confusing; in order to prevent such confusion, Applicant should refer to each element of the invention by only one term and use that term throughout the Specification whenever that element is discussed;
- in the context of Applicant’s invention, the terms “document knowledge” and “domain knowledge” on Page 4, Line 11 are confusing; Examiner cannot determine the difference between a “document component” and “document knowledge;” similarly, Examiner cannot determine the difference between a “domain component” and “domain knowledge;” Applicant should respond to this issue by clearly defining what constitutes “document knowledge” and “domain knowledge” and by clearly indicating how “document knowledge” and “domain

knowledge" are different from a "document component" and a "domain component."

Appropriate correction is required.

Claim Objections

Claims 1, 21 and 25 are objected to because of the following informalities:

- the term "domain knowledge" in Line 1 should be amended because, as indicated in the above objections to the Specification, it is confusing; for purposes of examination of Claim 1, Examiner will assume that "domain knowledge" is the answers to the user input questions of a typical document assembly system; this same problem also occurs in Claims 21 and 25; and
- the term "document knowledge" in Line 1 should be amended because, as indicated in the above objections to the Specification, it is confusing; for purposes of examination of Claim 1, Examiner will assume that "domain knowledge" is a collection of variables in document components; this same problem also occurs in Claims 21 and 25.

Claim 2 is objected to because of the following informalities:

- neither “variables” nor a “document” in the phrase “wherein *variables* in *said document* are linked to elements in *said domain model*” in Lines 1-2 is previously mentioned in the claims; and
- the term “document model” in Line 3 should be amended to — document component — because that is what it is; also, a document “model” is not previously mentioned in the claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 21 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Porter, U.S. Patent No. 6,473,892.

Claim 1:

Porter discloses a method of linking domain knowledge to document knowledge (see Figures 1-10; see Column 1, Line 1 through Column 20, Line 34), comprising:

- rendering document knowledge as textual components with variable fields (see Figure 7);
- building an object-oriented domain model including domain knowledge (see Column 6, Line 4 through Column 10, Line 8 – the referenced invention “builds an object-oriented domain model that includes domain knowledge” in that it queries a user for input data and then determines which objects to include in the model); and
- linking said document knowledge to said domain knowledge (see Column 6, Line 4 through Column 17, Line 55 – the referenced invention “links document knowledge to domain knowledge” in that it determines which paragraphs to include in the document based on user input).

Claim 2:

Porter discloses the method of Claim 1, wherein variables in said document are linked to elements in said domain model, such that if rules and constraints are tailored or developed to maintain consistency of the domain model, the document model will be affected (see Column 6, Line 4 through Column 17, Line 55 – the referenced invention “links document variables to domain model elements” “such that if rules and constraints are tailored or developed to maintain consistency of the domain model, the document model will be affected” in that the user can tailor the rules of the model, and, when the user does, the model is “affected”).

Claim 3:

Porter discloses the method of Claim 1, wherein elements in the domain model influence what appears in a rendered document (see Column 6, Line 4 through Column 17, Line 55 – the referenced invention discloses “domain model elements” that “influence what appears in a rendered document” in that the model elements are linked to document variables, and this will affect the appearance of the document; also, any “model” that is used in a document assembly system *inherently* includes “elements” that “influence the appearance of a rendered document”).

Claim 4:

Porter discloses the method of Claim 1, wherein said domain model comprises an explicit domain model which is reusable for a plurality of documents (see Column 6, Line 4 through Column 17, Line 55 – the referenced invention discloses an “explicit” domain model that is reusable for a plurality of documents as indicated in the cited text; also, any “model” that is used in a document assembly system is *inherently* “explicit” and is *inherently* “reusable for a plurality of documents”).

Claim 5:

Porter discloses the method of Claim 1, wherein said domain model comprises an object-oriented domain model independent of any document to be rendered (see Column 6, Line 4 through Column 17, Line 55 – the referenced invention discloses a “domain model” that is both “object-oriented” and “independent” as indicated in the cited

text), said domain model being usable for any of a plurality of documents and consistency of the document model is maintained based on said linking (see Column 6, Line 4 through Column 17, Line 55 – the referenced invention discloses a “domain model” that is usable for a plurality of documents and whose “consistency” is “maintained based on said linking” as indicated in the cited text).

Claim 6:

Porter discloses the method of Claim 1, wherein a plurality of documents are configurable from the domain model (see Column 6, Line 4 through Column 17, Line 55 – the referenced invention discloses a “domain model” that “configures a plurality of documents” as indicated in the cited text; also, any “model” that is used in a document assembly system is inherently “configures a plurality of documents”).

Claim 7:

Porter discloses the method of Claim 1, wherein said domain model comprises a stand-alone domain model, which is built separate and independent from a document (see Column 6, Line 4 through Column 17, Line 55 – the referenced invention discloses a “stand-alone domain model” that is built “separate and independent” from a document in that it comprises a form generator that builds the structure of the model).

Claims 21 and 25:

These claims are for a system and software that perform the method of Claim 1. Thus, Porter discloses every element of the claims using the same rationale.

Claims 1-7, 21 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Leymaster et al., U.S. Patent No. 6,182,095.

Claim 1:

Leymaster discloses a method of linking domain knowledge to document knowledge (see Figures 1-29; see Column 1, Line 1 through Column 16, Line 59), comprising:

- rendering document knowledge as textual components with variable fields (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention “renders document knowledge as textual components with variable fields” in that it comprises document text segments having variables that require user input to enter values for the variables);
- building an object-oriented domain model including domain knowledge (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention “builds an object-oriented domain model that includes domain knowledge” in that it comprises a structure builder tool that constructs document structure elements that are associated with user input questions); and

- linking said document knowledge to said domain knowledge (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention “links said document knowledge to said domain knowledge” in that it constructs the document by placing document text segments into document structure elements).

Claim 2:

Leymaster discloses the method of Claim 1, wherein variable in said document are linked to elements in said domain model, such that if rules and constraints are tailored or developed to maintain consistency of the domain model, the document model will be affected (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention discloses every element of this claim in that the document structure elements, the user input questions and the document text segments are linked, and, if the interrelationships between these elements are changed, then the “document model” will be affected).

Claim 3:

Leymaster discloses the method of Claim 1, wherein elements in the domain model influence what appears in a rendered document (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention discloses “elements in the domain model that influence what appears in a rendered document” in that the document structure elements “influence” the appearance of the rendered document; also, any “model” that

is used in a document assembly system *inherently* includes “elements” that “influence the appearance of a rendered document”).

Claim 4:

Leymaster discloses the method of Claim 1, wherein said domain model comprises an explicit domain model which is reusable for a plurality of documents (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention discloses an “explicit” domain model that is reusable for a plurality of documents as indicated in the cited text; also, any “model” that is used in a document assembly system is *inherently* “explicit” and is *inherently* “reusable for a plurality of documents”)..

Claim 5:

Leymaster discloses the method of Claim 1, wherein said domain model comprises an object-oriented domain model independent of any document to be rendered, said domain model being usable for any of a plurality of documents and consistency of the document model is maintained based on said linking (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention discloses a “domain model” that is usable for a plurality of documents and whose “consistency” is “maintained based on said linking” as indicated in the cited text).

Claim 6:

Leymaster discloses the method of Claim 1, wherein a plurality of documents are configurable from the domain model (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention discloses a “domain model” that “configures a plurality of documents” as indicated in the cited text; also, any “model” that is used in a document assembly system is inherently “configures a plurality of documents”).

Claim 7:

Leymaster discloses the method of Claim 1, wherein said domain model comprises a stand-alone domain model, which is built separate and independent from a document (see Column 4, Line 55 through Column 12, Line 44 – the referenced invention discloses a “stand-alone domain model that is built separate and independent from a document” in that it comprises document structure elements that are completely separate from the rendered document).

Claims 21 and 25:

These claims are for a system and software that perform the method of Claim 1. Thus, Porter discloses every element of the claims using the same rationale.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Buchanan et al., U.S. Patent No. 5,267,155; Clapp, U.S. Patent No. 5,313,394; Miller et al., U.S. Patent No. 5,446,653; Schoolcraft, U.S. Patent No. 5,729,751; and Frank, U.S. Patent Application Publication No. US 2001/0044813 A1.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doug Hutton whose telephone number is (703) 305-1701. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (703) 308-5186. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

WDH
March 5, 2004


HEATHER HERNDON
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